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MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			PATTERSON, MARC A	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 04/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/777,012	Applicant(s) LE ROY ET AL.	
	Examiner Marc A Patterson	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/5/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-32 and 35-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-32 and 35-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

NEW REJECTIONS

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21 – 28, 31 – 32 and 38 – 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beuzelin et al (U.K. Patent No. 2288177) in view of Hughes et al (U.S. Patent No. 5,705,565).

With regard to Claim 21, Beuzelin et al disclose a structure comprising, successively, a first layer of high density polyethylene, a layer of binder, and a second layer of ethylene vinyl alcohol (page 13, line 11 and lines 16 – 23); the binder is a polyolefin comprising high density polyethylene and low density polyethylene (page 9, lines 7 – 19) grafted with an unsaturated carboxylic acid (page 5, lines 1 – 29; page 6, lines 1 – 4), and the structure comprises a third layer of binder (page 13, line 11); the structure therefore comprises a third layer of a mixture of high density polyethylene and low density polyethylene. Beuzelin et al fail to disclose a third layer which is a mixture of a polyolefin and a polyamide.

Hughes et al teach that a composition comprising high density polyethylene and a low density polyethylene (column 5, lines 8 – 9) is used interchangeably (column 5, line 7) with a composition comprising high density polyethylene and low density polyethylene and polyamide (column 5, line 22) as a binder layer (tie layer; column 6, lines 6 – 10) between high density

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polyethylene and ethylene vinyl alcohol (column 6, lines 6 – 10) for the purpose of obtaining a binder having desirable adhesive properties (column 6, lines 6 – 10). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for the mixture of polyolefin and a polyamide in Beuzelin et al, which is a binder layer, depending on the desired adhesive properties of the end product as taught by Hughes et al.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a mixture of polyolefin and a polyamide in Beuzelin et al in order to obtain a binder having desirable adhesive properties as taught by Hughes et al.

With regard to Claim 22, Beuzelin et al fail to disclose two layers of binder between the ethylene – vinyl alcohol layer and polystyrene layer. However, Beuzelin et al disclose one layer of binder between the ethylene – vinyl alcohol layer and polystyrene layer, as discussed above. It would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to have provided for additional layers, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

With regard to Claims 23, 26 and 38 – 39, Beuzelin et al disclose a third layer which comprises a mixture of polyethylene and very low density polyethylene having a density of between 0.880 and 0.970 (page 9, lines 7 – 19) and a melt flow index of 7 g/10 min (page 22, lines 5 – 8); Beuzelin et al fail to disclose a polymer which comprises a third layer which comprises 70 – 95% of a mixture of polyethylene and very low density polyethylene and 5 – 30 parts by weight per hundred of a polyethylene with a density 0.930 to 0.950 g/cm³.

However, Beuzelin et al disclose a layer which comprises a mixture of polyethylene and very low density polyethylenes having a density of between 0.880 and 0.970 (the layer comprises a mixture of polyethylene and very low density polyethylenes having a density of between 0.880 and 0.970; page 9, lines 1 – 19) and a content of grafted unsaturated carboxylic acid of 0.005 to 5% by weight (page 5, lines 17 – 24) and teach that the compositions are employed for their resistance to separation of layers (page 15, lines 17 – 21). Therefore, one of ordinary skill in the art would have recognized the utility of varying the amounts of the polyethylenes in the mixture and their densities and the amount of grafted carboxylic acid to obtain a desired resistance to separation of layers. Therefore, the resistance to separation of the layers would be readily determined through routine optimization of the amounts of the polyethylenes in the mixture and their densities and the amount of grafted carboxylic acid by one having ordinary skill in the art depending on the desired end use of the product.

It therefore would be obvious for one of ordinary skill in the art to vary the amounts of the polyethylenes in the mixture and their densities and the amount of grafted carboxylic acid in order to obtain a desired resistance to separation of the layers, since the desired resistance to separation would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Beuzelin et al.

With regard to Claim 24, the density of the binder disclosed by Beuzelin et al is between 0.880 and 0.970 g/cm³ (page 9, lines 7 – 19).

With regard to Claim 25, the polyethylene disclosed by Beuzelin et al is linear low density polyethylene (page 9, lines 7 – 19).

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With regard to Claim 27, the binder disclosed by Beuzelin et al is a polyethylene grafted with maleic anhydride (page 5, lines 6 – 11), and a melt flow index of 7 g/10 min (page 22, lines 5 – 8) and a density between 0.920 and 0.930 g/cc (page 22, lines 5 – 8).

With regard to Claim 28, the grafted polyethylene is mixed with ethylene – vinyl acetate copolymer (page 11, lines 11 – 14); both the grafted polyethylene and ethylene – vinyl acetate have densities between 0.880 and 0.970. Beuzelin et al do not teach that the ethylene vinyl acetate is grafted; the claimed aspect of the grafted polyethylene being ‘diluted with an ungrafted polyethylene’ therefore reads on Beuzelin et al. Beuzelin et al fail to disclose from 70 to 98 % by weight non – grafted polyethylene.

However, Beuzelin et al disclose a layer which comprises non – grafted polyethylene by weight (the mixture comprises non – grafted polyethylene; page 11, lines 11 – 14 and teach that the compositions are employed for their resistance to separation of layers (page 15, lines 17 – 21). Therefore one of ordinary skill in the art would have recognized the utility of varying the amounts of non – grafted polyethylene to obtain a desired resistance to separation of layers. Therefore, the resistance to separation of the layers would be readily determined through routine optimization of the amounts of non – grafted polyethylene in the mixture by one having ordinary skill in the art depending on the desired end use of the product.

It therefore would be obvious for one of ordinary skill in the art to vary the amount of non – grafted polyethylene in the mixture in order to obtain a desired resistance to separation of the layers, since the desired resistance to separation would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Beuzelin et al.

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With regard to Claims 31 – 32, the third layer disclosed by Beuzelin et al comprises a high density polyethylene and very low density polyethylene (page 9, lines 7 – 19) cografted with an unsaturated carboxylic acid (fumaric acid; page 5, lines 12 – 29).

With regard to Claims 40 – 42, Beuzelin et al discloses a food container which contains a fluid consisting of the structure (the container is a food container, therefore containing air, which is a fluid; page 15, lines 16 – 23); the third layer is therefore in direct contact with the fluid which is contained.

With regard to Claims 43 – 44, Hughes et al fail to teach a structure in which the third layer comprises 60% to 70% by weight of the polyamide, 5 – 10% by weight of the grafted polymer and the remainder high density polyethylene. However, Hughes et al teach a structure in which the third layer comprises polyamide and grafted polymer, as discussed above, and Beuzelin et al teach that the compositions are employed for their resistance to separation of layers (page 15, lines 17 – 21). Therefore one of ordinary skill in the art would have recognized the utility of varying the amounts of polyamide and grafted polymer to obtain a desired resistance to separation of layers. Therefore, the resistance to separation of the layers would be readily determined through routine optimization of the amounts of polyamide and grafted polymer in the mixture by one having ordinary skill in the art depending on the desired end use of the product.

It therefore would be obvious for one of ordinary skill in the art to vary the amount of polyamide and grafted polymer in the mixture in order to obtain a desired resistance to separation of the layers, since the desired resistance to separation would be readily determined

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through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Beuzelin et al and Hughes et al.

With regard to Claim 45, Hughes et al teach the use of a polyamide comprising polyamide 6,6 (column 15, lines 1 – 20) the claimed aspect of the polyamide comprising a polyamide 6/6,6 copolymer which is a copolymer of caprolactam, adipic acid and hexamethylenediamine therefore reads on Hughes et al.

With regard to Claim 46, Beuzelin et al fail to disclose a structure having a first layer thickness of between 2 and 10 mm and a second layer thickness between 30 and 500 μm . However, Beuzelin et al disclose a structure having a layer thickness of 100 to 1000 μm and a total thickness of 100 μm to 3 mm (page 14, lines 24 – 29; page 15, lines 1 – 12).

3. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beuzelin et al (U.K. Patent No. 2288177) in view of Hughes et al (U.S. Patent No. 5,705,565) and further in view of Zhang et al (U.S. Patent No. 5,516,583).

Beuzelin et al and Hughes et al disclose a laminate structure comprising a layer of binder as discussed above. The binder consists of very low density polyethylene (page 9, lines 7 – 19 of Beuzelin et al), 5 – 35% by weight grafted polyethylene and 5 – 45% by weight polystyrene elastomer (page 3, lines 18 – 24; page 10, lines 24 – 29; page 11, lines 1 – 14 of Beuzelin et al). Beuzelin et al fail to disclose a polyethylene which is a metallocene polyethylene.

Zhang et al teach the use of metallocene polyethylene in the making of an adhesive (column 4, lines 17 – 30 of Zhang) for the purpose of making an adhesive having excellent extrudability (column 2, lines 24 – 32 of Zhang). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for the metallocene polyethylene of Zhang et al in

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Beuzelin et al and Hughes et al, which comprises an adhesive, depending on the desired extrudability of the end product as taught by Zhang et al

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for metallocene polyethylene in Beuzelin et al and Hughes et al in order to make an adhesive having excellent extrudability as taught by Zhang et al.

4. Claims 30 and 35 – 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beuzelin et al (U.K. Patent No. 2288177) in view of Hughes et al (U.S. Patent No. 5,705,565) and further in view of Melot et al (U.S. Patent No. 5,998,545).

Beuzelin et al and Hughes et al disclose a laminate structure comprising a layer of binder comprising polyamide as discussed above. With regard to Claims 30 and 35, Beuzelin et al fail to disclose a polyamide which comprises a copolymer comprising polyamide 6 and polytetramethylene glycol blocks.

Melot teaches the grafting of styrene – polyolefin blends with copolymers having polyamide 6 blocks and polytetramethylene glycol blocks (column 4, lines 15 – 19 of Melot) for the purpose of making films having good stability after extrusion (column 4, lines 59 – 67 of Melot). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for the grafting with polyamide 6 and polytetramethylene glycol blocks of Melot in Beuzelin et al and Hughes et al, which comprises a styrene – polyolefin blend, depending on the desired stability after extrusion of the end product.

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It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a copolymer having polyamide 6 blocks and polytetramethylene glycol blocks in Beuzelin et al and Hughes et al in order to make films having good stability after extrusion as taught by Melot.

With regard to Claim 36, the binder disclosed by Beuzelin et al and Hughes et al comprises a mixture of polyethylene and very low density polyethylene and an ethylene – alkyl methacrylate – maleic anhydride copolymer (page 5, lines 6 – 27 of Beuzelin et al).

With regard to Claim 37, the binder disclosed by Beuzelin et al and Hughes et al comprises two functionalized polyolefins comprising at least 40% ethylene (low density polyethylene and linear low density polyethylene; page 9, lines 7 – 19 of Beuzelin et al); the binder therefore comprises more than 50% ethylene; the binder also comprises isoprene rubber (page 8, lines 10 – 14) and is therefore crosslinkable.

5. Claims 47 – 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beuzelin et al (U.K. Patent No. 2288177) in view of Hughes et al (U.S. Patent No. 5,705,565) and further in view of Hata et al (U.S. Patent No. 6,033,749).

Beuzelin et al and Hughes et al disclose a container comprising a laminate comprising high density polyethylene and ethylene vinyl alcohol copolymer as discussed above. With regard to Claims 47 – 49, Beuzelin et al and Hughes et al fail to disclose a container which is a petrol container.

Hata et al teach a petrol container (fuel container; column 1, lines 8 – 11) comprising a laminate comprising high density polyethylene and ethylene vinyl alcohol copolymer (column 5,

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lines 50 – 52) for the purpose of obtaining a petrol container which provides good impermeability to oxygen – containing petrol (column 1, lines 8 – 11). Therefore, one of ordinary skill in the art would have recognized the utility of providing for the fuel tank of Hata et al as the container of Beuzelin et al and Hughes et al, depending on the impermeability to oxygen – containing petrol of the end product as taught by Hata et al.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for the fuel tank of Hata et al as the container of Beuzelin et al and Hughes et al in order to obtaining a petrol container which provides good impermeability to oxygen – containing petrol as taught by Hata et al.

ANSWERS TO APPLICANT'S ARGUMENTS

6. Applicant's arguments regarding the 35 U.S.C. 103(a) rejection of Claims 21 – 28, 31 – 32 and 38– 46 as being unpatentable over Beuzelin et al (U.K. Patent No. 2288177) in view of Hughes et al (U.S. Patent No. 5,705,565), 35 U.S.C. 103(a) rejection of Claim 29 as being unpatentable over Beuzelin et al (U.K. Patent No. 2288177) in view of Hughes et al (U.S. Patent No. 5,705,565) and further in view of Zhang et al (U.S. Patent No. 5,516,583) and 35 U.S.C. 103(a) rejection of Claims 30 and 35 – 37 as being unpatentable over Beuzelin et al (U.K. Patent No. 2288177) in view of Hughes et al (U.S. Patent No. 5,705,565) and further in view of Melot et al (U.S. Patent No. 5,998,545), of record in the previous Action, have been considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 12 of Paper No. 14, that the rejection is improper because the only use for which Hughes et al suggest adding other polymers to its graft polymer is in making

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molded or extruded shaped articles; when Hughes discusses the separate use of its polymer as an adhesive, Applicant argues, it provides no suggestion to combine the polymer with any other polymer.

However, Hughes et al teach the blending of its polymer with other polymer for the production of extruded shaped articles (column 4, lines 62 – 65) and teaches the use of an extruded layer of the polymer for use as an adhesive film, which is clearly an extruded article (column 6, lines 9 – 12). The fact that Hughes et al does not teach the addition of other polymers when discussing the adhesive does not exclude the addition of other polymers, and a discussion of the other polymers is in fact unnecessary, as Hughes et al have already taught the blending of the polymers with other polymers in the making of an extruded article and the adhesive film is extruded.

Applicant also argues, on page 13, that Hughes et al exclude the use of other polymer components when adhesive properties are desired.

However, as stated above, the fact that Hughes et al does not teach the addition of other polymers when discussing the adhesive does not exclude the addition of other polymers.

Applicant also argues, on page 14, that even if the Beuzelin et al binder modified by Hughes et al generally encompasses the possibility of a mixture of polyamide, high density polyethylene and grafted and ungrafted polymers, it also encompasses hundreds or thousands of other combinations; the only suggestion for arriving at Applicant's invention is using Applicant's disclosure.

However, because the combination of the Beuzelin et al binder modified by Hughes et al generally encompasses the possibility of a mixture of polyamide, high density polyethylene and

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grafted and ungrafted polymers, it discloses the combination, and it is therefore not necessary to use Applicant's disclosure as a blueprint.

Applicant also argues, on page 15, that Beuzelin et al do not encompass or suggest any embodiment which includes a co – graft of polyethylene and a polymer selected from the claimed group C2; the only co – grafts of Beuzelin et al, Applicant argues, are with polystyrene, and there is no suggestion to co – graft two polymers on page 9.

However, Beuzelin et al clearly disclose the co – grafting of polymers (page 10, line 2) which include polyethylene (page 9, line 10) and polystyrene (page 8, line 17).

Applicant also argues, on page 16, that one of ordinary skill in the art would not necessarily select polyamide from the teachings of Hughes et al, as Hughes et al teaches a large number of possible additional polymers.

However, as stated above, one of ordinary skill in the art would have recognized the advantage of providing for the mixture of polyolefin and a polyamide in Beuzelin et al, which is a binder layer, depending on the desired adhesive properties of the end product as taught by Hughes et al.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a mixture of polyolefin and a polyamide in Beuzelin et al in order to obtain a binder having desirable adhesive properties as taught by Hughes et al.

Applicant also argues, on page 16, that the cited case law does not suggest that it would be obvious to repeat a prior element, because there is no motivation to add an additional layer of adhesive when one already exists, and it could be potentially detrimental. However, Beuzelin et

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al do not teach that it is detrimental. Furthermore, Beuzelin et al teach that the compositions are employed for their resistance to separation of layers (page 15, lines 17 – 21). Therefore, one of ordinary skill in the art would have recognized the utility of varying the number of adhesive layers to obtain a desired resistance to separation of layers. Therefore, the resistance to separation of the layers would be readily determined through routine optimization of the amounts of the number of adhesive layers depending on the desired end use of the product.

Applicant also argues, on page 16, that the third layer of Beuzelin et al differs from the third layer of the claimed invention in that it is a binder layer, whereas Applicant's third layer is not, as it is not claimed to be a binder layer. However, binder layers are not excluded by the third layer as claimed.

Applicant also argues on page 17, that Zhang and Melot do not teach modification which makes up for the deficiencies argued by Applicant. However, as stated above, Zhang et al teach the use of metallocene polyethylene in the making of an adhesive (column 4, lines 17 – 30 of Zhang) for the purpose of making an adhesive having excellent extrudability (column 2, lines 24 – 32 of Zhang). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for the metallocene polyethylene of Zhang et al in Beuzelin et al and Hughes et al, which comprises an adhesive, depending on the desired extrudability of the end product as taught by Zhang et al

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for metallocene polyethylene in Beuzelin et al and Hughes et al in order to make an adhesive having excellent extrudability as taught by Zhang et al.

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Furthermore, Melot teaches the grafting of styrene – polyolefin blends with copolymers having polyamide 6 blocks and polytetramethylene glycol blocks (column 4, lines 15 – 19 of Melot) for the purpose of making films having good stability after extrusion (column 4, lines 59 – 67 of Melot). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for the grafting with polyamide 6 and polytetramethylene glycol blocks of Melot in Beuzelin et al and Hughes et al, which comprises a styrene – polyolefin blend, depending on the desired stability after extrusion of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a copolymer having polyamide 6 blocks and polytetramethylene glycol blocks in Beuzelin et al and Hughes et al in order to make films having good stability after extrusion as taught by Melot.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Patterson, whose telephone number is (703) 305-3537. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (703) 308-4251. FAX communications should be sent to (703) 872-9310. FAXs received after 4 P.M. will not be processed until the following business day.

Marc A. Patterson, PhD.

Marc Patterson
Art Unit 1772

Harold Pyon
HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772 4/26/04